2001 Annual Drinking Water Quality Report

Naval Air Station, Pensacola

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is groundwater drawn through a series of ten wells from the Sand and Gravel Aquifer.

We are pleased to report that our drinking water meets all federal and state requirements. If you have any questions about this report or concerning your water utility, please call 452-4611 ext 102.

Pensacola Naval Air Station routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1st to December 31st 2001.

As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for inorganic contaminants, radiologicals, synthetic organic contaminants, volatile organic contaminants, lead and copper], though representative, is more than one year old.

In the table below you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Maximum Contaminant Level or MCL: *The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.*

Maximum Contaminant Level Goal or MCLG: *The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

Action Level (AL): *The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*

"ND" *means not detected and indicates that the substance was not found by laboratory analysis.*

Parts per million (ppm) or Milligrams per liter (mg/l) *– one part by weight of analyte to*

1 million parts by weight of the water sample.
Parts per billion (ppb) or Micrograms per liter (µg/l) *– one part by weight of analyte to 1 billion parts by weight of the water sample.*
Parts per trillion (ppt) or Nanograms per liter (ng/l) *– one part by weight of analyte to 1 trillion parts by weight of the water sample.*
Picocurie per liter (pCi/l) *– measure of the radioactivity in water.*

2001 TEST RESULTS TABLE

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Number of Positive Samples	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	Aug/Sep 2001	N	1	0	For systems collecting fewer than 40 samples per month: presence of coliform bacteria in more than 1 sample collected during a month.	Naturally present in the environment

** Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected**	Range of Results	MCLG	MCL	Likely Source of Contamination
Radiological Contaminants							
Alpha (pCi/l)	01/99	N	2.6	0.2 – 2.6	0	15	Erosion of natural deposits
Radium 226 or combined radium (pCi/l)	01/99	N	4	1.3 – 4	0	5	Erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides							
Ethylene Dibromide (ppt)	4/99 & 03/01	N	8	ND - 8	0	20	Discharge from petroleum refineries
Volatile Organic Contaminants							
Tetrachloroethylene (ppb)	01/99 & 04/99 -03/00	N	0.23 average	ND – 0.23	0	3	Discharge from factories and dry cleaners
Total Trihalomethanes (TTHMs)							
TTHM [Total Trihalomethanes] (ppb)	01/01	N	43 (avg)	36 - 50	NA	100	By-product of drinking water chlorination

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Lead and Copper (Tap Water)							
Copper (tap water) (ppm)	Jun – Sep 2000	N	0.109	2 of 69	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jun – Sep 2000	N	ND	1 of 69	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected**	Range of Results	MCLG	MCL	Likely Source of Contamination

Inorganic Contaminants							
Barium (ppm)	01/99	N	0.035	0.008 – 0.035	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide (ppb)	01/99	N	21	ND - 21	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	01/99	N	0.04	ND – 0.04	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (inorganic) (ppb)	01/99	N	0.4	ND – 0.4	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nitrate (as Nitrogen) (ppm)	01/01	N	2.09	ND – 2.09	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	01/01		0.04	ND – 0.04	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits
Total Nitrate + Nitrite (as Nitrogen) (ppm)	01/01	N	2.13	ND – 2.13	N/A	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	01/99	N	10	4 – 10	N/A	160	Salt water intrusion, leaching from soil

Reasons for monitoring unregulated contaminants: (1) To determine appropriate MDLs for the unregulated contaminants, and (2) To evaluate which compounds should be considered regulated compounds.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	Average Result	Range of Results at or Above Detection	Likely Source of Contamination
Group I Unregulated Organic Contaminants				
Dieldrin (ppb)	Jan – Nov 2001	0.020	ND - 0.063 (average)	

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:
(A) ***Microbial contaminants****, such as viruses and bacteria, which may come from*

sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
(B) ***Inorganic contaminants****, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.*
(C) ***Pesticides and herbicides****, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.*
(D) ***Organic chemical contaminants****, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.*
(E) ***Radioactive contaminants****, which can be naturally-occurring or be the result of oil and gas production and mining activities.*

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Pensacola Naval Air Station would like for you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.